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EXAMINER

RAYYAN, SUSAN F

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/055,828	Applicant(s) REED ET AL.	
	Examiner Susan F. Rayyan	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 20-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)


- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. In view of the pre-appeal brief filed on September 13, 2007,
PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

2. Claims 1-18, 20-32 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 14-16, 18,20-22,24- 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,371,807 issued to Michael S. Register et al ("Register") and US Patent 6,026,387 issued to Kesel ("Kesel").

Regarding claim 1, Register teaches:

associating values with a plurality of predefined words (column 5, lines 38-50, knowledgebase of keywords (predefined) /category profile, each category has an

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associated profile (keywords) and each keyword in the profile has an associated numeric weight);

comparing words ... with said predefined words (column 2, lines 35-40, as receiving a natural language input text , parsing into a first list of recognized keywords (words, phrases, expressions)) and (column 5, lines 34-50, as list of recognized are passed and compared with weighted keywords associated with categories);

generating an indication to rate said customer feedback based an identification of at least one word in said customer feedback a equivalent to one of said predefined words and the value of said equivalent one of said predefined words and presenting said indication to a customer representative for said enterprise (column 5, lines 48-62, as determining profile weights and combine profile weights to determine a similarity score for all categories and generating a list of those categories above a threshold, categories are the indications).

Register does not explicitly teach receiving customer feedback ... Kesel does teach receiving customer feedback (at Figure 3:76, as raw comment) to communicate comments from a customer to the provider. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Register with receiving customer feedback to communicate comments from a customer to the provider as described by Kesel (at column 1, lines 9-11)

Regarding claim 14 is rejected based on the same rationale as claim 1.

Regarding claim 15, Kesel further teaches wherein 'the instructions when executed causes the system to generate the indication by generating an indication of customer satisfaction or dissatisfaction' as each comment is assigned an attitude characteristic which provides an indicator of the overall attitude expressed in the oral comment by the consumer (col. 8, lines 56-62; col. 2, lines 19-22).

Regarding claim 16, Kesel further teaches wherein 'the instructions when executed causes the system to generate the indication by generating an indication of customer approval or disapproval' as each comment is assigned an attitude characteristic which provides an indicator of the overall attitude expressed in the oral comment by the (i.e., good, desired, and excellent) consumer (col. 8, lines 56-62; col. 2, lines 19-22).

Regarding claim 18, Kesel further teaches wherein 'the instructions when executed cause the system to store rating data according to a user-defined data type, the rating data associating a list of predefined words with respective values' as ranking the each of the selected categories as poor, less than satisfactory, satisfactory, excellent which may be reflective of a numerical range of 1 to 4 inclusive (col. 8, lines 56-62; col. 2, lines 19-22).

Regarding claim 20, Kesel further teaches 'the instructions when executed cause the system to store a negative value for a predefined word having a negative connotation and a positive value for a predefined word having a positive connotation in the rating data' as ranking the each of the selected

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categories as poor, less than satisfactory, satisfactory, excellent which may be reflective of a numerical range of 1 to 4 inclusive (col. 8, lines 56-62; col. 2, lines 19-22). Although, Kesel does not particularly associate a negative value for a word having a negative connotation, the prior art associates a low value on the positive scale to indicate its negative ranking. Examiner submits that associating a low value to reflect a negative connotation word is equivalent to assigning a negative value to a word which has a negative connotation since they perform similar function: "express the level of dissatisfactions in consumer's comment". [Chase discloses a system for connotative analysis with 8-point (i.e., 0-8) scale to capture a range of emotions: four categories of positive emotions and four categories of negative emotions, see col. 4, lines 9-35 of U.S. Patent 6,332,143.]

Regarding claim 21, Kesel teaches wherein "the instructions when executed cause the system to store modifier values for adjectives to increase the positive and negative values of the words' as the analyzer selects the terms that best reflects the characteristic of the comment. For example, if the consumer is *satisfied* with the product, the assigned attitude will be good"; on the other hand, if he/she is *very satisfied* with the product then the assigned attitude will be "excellent". Thus, the increasing or decreasing levels of consumer satisfactions have been factored in with the provider-defined index to correspond to consumer's perceptions (col. 9, lines 13-17).

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Regarding claim 22, Register further teaches wherein 'the instructions when executed cause the system to invoke a first routine to generate the indication' as the analyzer selects the terms that best reflects the characteristic of the comment being normalized (column 5, lines 48-62, as determining profile weights and combine profile weights to determine a similarity score for all categories and generating a list of those categories above a threshold, categories are the indications).

Regarding claim 24, Kesel further teaches wherein 'the instructions when a relational table' as analyzer selects the terms that best reflects the characteristic of the comment being normalized and the normalized comment is recorded in a database accessible through the microprocessor computer (col. 9, lines 13-34).

Regarding claim 25, Register teaches a system comprising:
one or more storage modules to store rating data associating a list of predefined words with respective values (column 5, lines 38-50, knowledgebase of keywords (predefined) /category profile, each category has an associated profile (keywords) and each keyword in the profile has an associated numeric weight);
... compare words in with said customer feedback (column 2, lines 35-40, as receiving a natural language input text , parsing into a first list of recognized keywords (words, phrases, expressions)) and (column 5, lines 34-50, as list of recognized are passed and compared with weighted keywords associated with categories);

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generate an indication to rate said customer feedback based an identification of at least one word in said customer feedback a equivalent to one of said predefined words and the value of said equivalent one of said predefined words and present said indication to a customer representative for said enterprise (column 5, lines 48-62, as determining profile weights and combine profile weights to determine a similarity score for all categories and generating a list of those categories above a threshold, categories are the indications).

Register does not explicitly teach customer feedback ... Kesel does teach customer feedback (at Figure 3:76, as raw comment) to communicate comments from a customer to the provider. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Register with customer feedback to communicate comments from a customer to the provider as described by Kesel (at column 1, lines 9-11)

Regarding claim 26, Kesel further teaches further teaches 'the one or more modules to store the rating data in a first relational table' as ranking the each of the selected categories as poor, less than satisfactory, satisfactory, excellent which may be reflective of a numerical range of 1 to 4 inclusive (col. 2, lines 19-22).

Claims 2-7, 12-13, 23, 27- 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register and Kesel in view of U.S. Patent 5,864,862 issued to Kriens et al. ('Kriens').

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Regarding claims 2, Kesel further teaches 'defining a data type having one or more data structures for storing predefined words and associated values' as a database representations of predetermined list of terms, or words associated with each characteristic in normalized representations for monitoring levels of customer satisfaction according to a provider-defined index (col. 9, lines 20-27; col. 6, lines 6-12).

Register and Kesel do not explicitly teach 'defining a user-defined data type'.

Kriens, however, teaches defining a user-defined data type based on upon the fundamental types defined in a programming language (col. 4, lines 60-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Kriens's teaching would have allowed Kesel 's to provide users with a mechanism to extend user's concepts and attach a specific meaning to data so that it becomes easier to work with as indicated by Kriens (col. 3, lines 56-62).

Regarding claim 3, Register and Kesel not explicitly teach wherein the one or more data structures comprise an array of the predefined words and associated values. Kriens, however, teaches wherein the 'one or more data structures comprise an array of the predefined words and associated values' as a list of zero to n elements used to store information of the same type (col. 5, lines 5-15). It would have been obvious to one of ordinary skill in the art at the time of the invention was

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made to modify the teachings of the cited references because Kriens 's teaching would have allowed Register-Kesel to quickly access to the stored data by permitting indexed access to one or more of its elements using a numeric index as indicated by Kriens (col. 5, lines 9-11).

Regarding claim 4, Register teaches invoking 'a first routine associated with the user-defined data type to load the predefined words and respective values in the one or more data structures' column 5, lines 38-50, knowledgebase of keywords (predefined) /category profile, each category has an associated profile (keywords) and each keyword in the profile has an associated numeric weight);

Regarding claim 5, Register teaches `invoking a second routine associated with the user-defined data type to calculate a score based on the words in the customer feedback and content of the one or more data structures, wherein generating the indication is based on the score (column 5, lines 48-62, as determining profile weights and combine profile weights to determine a similarity score for all categories and generating a list of those categories above a threshold, categories are the indications).

Regarding claim 6, Kesel further teaches wherein `invoking the first and second routines comprises invoking functions associated with the user-defined data type' as highlighting the characteristic brings up a window which displays the available predetermined list of terms for that characteristic (col. 9, lines 13-17; col. 7, line 5 — col. 8, line 62; col. 11, lines 35-39).

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Regarding claim 7, Kesel further teaches 'storing the one or more data structures in a first relational table' as the normalized comment is recorded in a relational database accessible through the microprocessor computer (col. 9, lines 32-64 and lines 13-17).

Regarding claim 12, Kesel further teaches wherein 'receiving the customer feedback comprises translating voice feedback to text feedback' as the consumer feedback apparatus uses a microphone which is linked directly to a microprocessor for direct voice-to-text conversion (col. 11, lines 35-38).

Regarding claim 13, Kesel further teaches wherein 'receiving the customer feedback comprises receiving the customer feedback in a database system' as consumer normalized comment is recorded in a database (col. 9, lines 32-34).

Regarding claim 23, Kesel further teaches wherein 'the instructions when executed cause the system to invoke the first routine by invoking a function associated with the data type' as a database representations of predetermined list of terms, or words associated with each characteristic in normalized representations for monitoring levels of customer satisfaction according to a provider-defined index (col. 9, lines 20-27; col. 6, lines 6-12). Register and Kesel do not explicitly teach 'defining a user-defined data type'. Kriens, however, teaches defining a user-defined data type based on upon the fundamental types defined in a programming language (col. 4, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the

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teachings of the cited references because Kriens's teaching would have allowed Register-Kesel to provide users with a mechanism to extend user's concepts and attach a specific meaning to data so that it becomes easier to work with as indicated by Kriens (col. 3, lines 56-62).

Regarding claim 27, Kesel further teaches 'the one or more modules to store the rating data as a data type in the first relational table' as a database representations of predetermined list of terms, or words associated with each characteristic in normalized representations for monitoring levels of customer satisfaction according to a provider-defined index (col. 9, lines 20-27; col. 6, lines 6-12). Register and Kesel do not explicitly teach 'defining a user-defined data type'. Kriens, however, teaches defining a user-defined data type based on upon the fundamental types defined in a programming language (col. 4, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Kriens's teaching would have allowed Register-Kesel to provide users with a mechanism to extend user's concepts and attach a specific meaning to data so that it becomes easier to work with as indicated by Kriens (col. 3, lines 56-62).

Regarding claim 28, Kesel further teaches 'one or more storage modules to store the customer feedback in a second relational table' as the normalized comment is recorded in a relational database accessible through the microprocessor computer (col. 9, lines 32-64).

Claims 8-9 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register and Kesel in view of Kriens and further in view of Trout (U.S. Patent 5,566,349).

Regarding claim 8, Kesel further teaches 'storing customer feedback in a second relational table' as the normalized comment is recorded in a relational database accessible through the microprocessor computer (col. 9, lines 32-64). Register, Kesel, and Kriens do not explicitly teach wherein generating the indication is based on performing a join of the first and second relational tables. Trout, however, teaches 'performing a join of the first and second relational tables' as DML shall provide for data representing multiple tables (col. 37, lines 27-32). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Trout's teaching would have allowed Register-Kesel-Kriens's to provide the requested data via joining multiple tables in order to retrieve meaningful data as indicate by Trout (col. 37, lines 29-32).

Regarding claim 9, Register, Kesel, and Kriens do not explicitly teach distributing the relational table across plural access modules. Trout, however, teaches 'distributing the relational table across plural access modules' as access data in a distributed database system that is partitioned across multiple, interconnected systems (col. 38, lines 35-42). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Trout's teaching

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would have allowed Register- Kesel- Kriens's to improve system performance and implementation cost as indicate by Trout (col. 1, lines 10-15; col. 4, lines 20-23; 36-37 and 40-46).

Regarding claim 29, Kesel further teaches 'perform the comparison' as compare comments from one store with another (col. 9, lines 41-48).

Register, Kesel, and Kriens do not explicitly teach wherein the controller is adapted to perform a join of the first and second relational tables. Trout, however, teaches 'performing a join of the first and second relational tables' as DML shall provide for data representing multiple tables (col. 37, lines 27-32). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Trout's teaching would have allowed Register- Kesel - Kriens' to provide the requested data via joining multiple tables in order to retrieve meaningful data as indicate by Trout (col. 37, lines 29-32).

Regarding claim 30, Kesel further teaches 'wherein the controller comprises a fist routine to perform the comparison' as entering a second store identifier in field 93 enables the apparatus to select and compare comments from one store with another (col. 9, lines 41-48).

Regarding claim 31, Kesel further teaches 'wherein the first routine is a function associated with the data type' as a database representations of predetermined list of terms, or words associated with each characteristic in normalized

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representations for monitoring levels of customer satisfaction according to a provider-defined index (col. 9, lines 20-27; col. 6, lines 6-12). Register and Kesel do not explicitly teach 'user-defined data type'. Kriens, however, teaches a user-defined data type based on upon the fundamental types defined in a programming language (col. 4, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Kriens's teaching would have allowed Register -Kesel to provide users with a mechanism to extend user's concepts and attach a specific meaning to data so that it becomes easier to work with as indicated by Kriens (col.3, lines 56-62).

Regarding claim 32, Kesel further teaches wherein 'the controller further comprises a second routine to load the rating data' as analyzer selects the terms that best reflects the characteristic of the comment being normalized and the normalized comment is recorded in a database accessible through the microprocessor computer (col. 9, lines 13-34).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Register and Kesel in view of Kriens further in view of Bossemeyer, Jr. et al. ('Bossemeyer' hereinafter) (U.S. Patent 6,510,427 B1).

Regarding claim 10, Register, Kesel, and Kriens do not explicitly teach receiving the customer feedback comprises receiving the customer feedback in electronic mail.

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Bossemeyer, however, 'receiving the customer feedback comprises receiving the customer feedback in electronic mail' as data formatter identifies the received digital message as an electronic submission such as an email message (col. 12, lines 15-25). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Bossemeyer 's teaching would have allowed Register- Kesel--Kriens's to simplified the acquisition of consumer feedback regarding the goods and services offered by the provider to determined where improvements in products or services should be made as indicated by Bossemeyer (col. 1, line 38 col. 2, line 4).

Regarding claim 11, Register, Kesel, and Kriens do not explicitly teach wherein receiving the customer feedback comprises receiving customer-entered feedback at a web server.

Bossemeyer, however, 'receiving the customer feedback comprises receiving customer-entered feedback at a web server' as data formatter identifies the received digital message as an electronic submission such as a web page (col. 12, lines 15-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Bossemeyer 's teaching would have allowed Register- Kesel- Kriens's to simplified the acquisition of consumer feedback regarding the goods and services offered by the provider to determined where improvements in products or services should be made as indicated by Bossemeyer (col. 1, line 38 col. 2, line 4).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Register and Kesel in view of U.S. Patent 6,332,143 B1)issued to Chase ("Chase").

Regarding claim 17, Register and Kesel do not teach wherein 'the instructions when executed cause the system to generate the indication by generating an indication of customer emotion'.

Chase however, teaches a system for connotative analysis with 8-point (i.e., 0-8) scale to capture a range of emotions: four categories of positive emotions and four categories of negative emotions (col. 4, lines 9-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the cited references because Chase 's teaching would have allowed Register- Kesel to examine and interpret the response of individual's position and better understand the individual's attitude toward the concept of the object being rated as indicated (col. 2, lines 57-61).

Response to Arguments

4. Applicant's arguments with respect to claims 1-18, 20-32 have been considered but are moot in view of the new ground(s) of rejection.

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Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan F. Rayyan whose telephone number is 571-272-1675. The examiner can normally be reached on M-F, 7:30-4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Susan Rayyan

November 26, 2007



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